



**Rules and
Regulations for
the Classification
of Naval Ships,
January 2012**

Notice No. 4

Effective Date of Latest
Amendments:

See page 1

Issue date: November 2012

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RULES AND REGULATIONS FOR THE CLASSIFICATION OF NAVAL SHIPS, *January 2012*

Notice No. 4

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Classification of Naval Ships, January 2012*. The amendments are effective on the dates shown:

Volume	Part	Chapter	Section	Effective date
1	1	1	1, 2, 3, 4, 8	1 October 2012
1	1	2	3	Corrigendum
2	8	2	6	Corrigendum
2	9	1	5	Corrigendum
2	10	1	16	Corrigendum
3	3	2	8	Corrigendum

It will be noted that the amendments also include corrigenda, which are effective from the date of this Notice.

The *Rules and Regulations for the Classification of Naval Ships, January 2012* are to be read in conjunction with this Notice No. 4. The status of the Rules is now:

Rules for Naval Ships	Effective date:	January 2012
Notice No. 1	Effective date:	1 January 2013 & Corrigenda
Notice No. 2	Effective date:	1 January 2013 & Corrigenda
Notice No. 3	Effective date:	1 January 2013
Notice No. 4	Effective date:	1 October 2012 & Corrigenda

Part 1, Chapter 1
General Regulations

Effective date 1 October 2012

■ Section 1

1.1 Lloyd's Register **Group Limited** (hereinafter referred to as 'LR'), which is recognised under the laws of the United Kingdom as a corporate body ~~and a charity established for the benefit of the community~~, was founded in 1760. It was established for the purpose of producing a faithful and accurate classification of merchant shipping. It now primarily produces classification Rules. **Lloyd's Register Group Limited and its subsidiaries are hereinafter referred to as 'LR Group'.**

1.2 Classification services are delivered to clients by a number of ~~other members~~ **subsidiaries** of the Lloyd's Register Group **Limited**, including: Lloyd's Register EMEA, Lloyd's Register Asia, Lloyd's Register North America, Inc., and Lloyd's Register Central and South America Limited.

~~1.3 The Lloyd's Register Group (hereinafter referred to as 'the LR Group') comprises charities, other forms of organisation and non-charitable companies, with the latter supporting the charities in their main goal of enhancing the safety of life and property, at sea, on land and in the air, for the benefit of the public and the environment.~~

■ Section 2

2.1 LR remains the sole classification society in the LR Group. LR is managed by a Board of ~~Trustees~~ **Directors** (hereinafter referred to as 'the Board').

The Board has:

appointed a Classification Committee and determined its powers and functions and authorised it to delegate certain of its powers to a Classification Executive and Devolved Classification Executives;
appointed Technical Committees and determined their powers, functions and duties.

2.2 The LR Group has established National and Area Committees in the following:

Countries:	Areas:
Australia (via Lloyd's Register Asia)	Benelux (via Lloyd's Register EMEA)
Canada (via Lloyd's Register North America, Inc.)	Central America (via Lloyd's Register Central and South America Ltd)
China (via Lloyd's Register Asia)	Nordic Countries (via Lloyd's Register EMEA)
Egypt (via Lloyd's Register EMEA)	South Asia (via Lloyd's Register Asia)
Federal Republic of Germany (via Lloyd's Register EMEA)	Asian Shipowners (via Lloyd's Register Asia)
France (via Lloyd's Register EMEA)	Greece (via Lloyd's Register EMEA)
Italy (via Lloyd's Register EMEA)	
Japan (via Lloyd's Register Group Limited)	
New Zealand (via Lloyd's Register Asia)	
Poland (via Lloyd's Register (Polska) Sp zoo)	
Spain (via Lloyd's Register EMEA)	
United States of America (via Lloyd's Register North America, Inc.)	

■ Section 3

(Part only shown)

3.1 LR's Technical Committee is at present composed of a maximum of 80 members which includes:

Ex officio members:

- Chairman and Chief Executive Officer of **LR Lloyd's Register Group Limited**
- Chairman of the Classification Committee of **LR Lloyd's Register Group Limited**

■ Section 4

(Part only shown)

4.1 LR's Naval Ship Technical Committee is at present composed of a maximum of 50 members and includes:

Ex officio members

- Chairman and Chief Executive Officer of LR Lloyd's Register Group Limited

■ Section 8

8.3 Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

~~8.3~~ 8.4 Notwithstanding the previous clause, the LR Group will not be liable for any loss of profit, loss of contract, loss of use or any indirect or consequential loss, damage or expense sustained by any person caused by any act, omission or error or caused by any inaccuracy in any information or advice given in any way by or on behalf of the LR Group even if held to amount to a breach of warranty.

~~8.4~~ 8.5 Any dispute about LR's services is subject to the exclusive jurisdiction of the English courts and will be governed by English law.

Volume 1, Part 1, Chapter 2
Classification Regulations

CORRIGENDUM

■ Section 3
Character of Classification and
Class notations

3.8 Machinery and Engineering Systems
notations

Table 2.3.2 Machinery Class Notations
(Part only shown)

Machinery Notations See 3.8
RAS(B) Replenishment at Sea, Abeam
RAS(V) Replenishment at Sea, VERTREP
(NT) Additional to RAS() , NATO requirements
UMS Unattended Machinery Spaces
CCS Centralised Control Station
ICC Integrated Computer Control
IP Integrated Propulsion
~~IBS Integrated Bridge System~~
PRM Provision Refrigeration Machinery

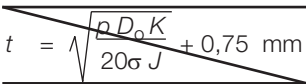
Volume 2, Part 8, Chapter 2
Other Pressure Vessels

CORRIGENDUM

■ Section 6
Conical ends subject to internal
pressure

6.2 Minimum thickness

6.2.1 The minimum thickness, t , of the cylinder, knuckle and conical section at the junction and within the distance L from the junction is to be determined by the following formula:


$$t = \sqrt{\frac{p D_o K}{20 \sigma J}} + 0,75 \text{ mm}$$
$$t = \frac{p D_o K}{20 \sigma J} + 0,75 \text{ mm}$$

where

- t, p, σ and J are as defined in 1.2
- D_o = outside diameter, in mm of the conical section or end, see Fig. 1.5.1 in Chapter 1
- K = a factor, taking into account the stress in the knuckle, see Table 1.5.1 in Chapter 1.

Volume 2, Part 9, Chapter 1

Control Engineering Systems

CORRIGENDUM

■ Section 5.6 Integrated computer control – ICC notation

~~5.1~~ 6.1 General

~~5.1.3~~ 6.1.3 Special consideration will be given to integrated computer control systems for other applications, except where these are addressed by other control engineering class notations. ~~In particular, see Vol 3, Pt 1, Ch 4,5 for requirements of the optional class notation IBS – Integrated Bridge Navigation Systems.~~

Volume 2, Part 10, Chapter 1

Electrical Engineering

CORRIGENDUM

■ Section 16 Electric propulsion

16.5 Protection of propulsion system

Table 1.16.1 Electric propulsion equipment: Alarms and safeguards

Item	Alarm	Note
Electric propulsion equipment ventilation and cooling medium temperature	High	See 16.1.2 and ~~16.3.9~~ 16.3.8
Electric propulsion transformer winding temperature	High	See ~~9.1.11~~ 10.1.11
Electric propulsion generator excitation	Overload	See ~~16.5.6~~ 16.5.7
Electric propulsion generators and motors winding temperature	High	See 16.1.3
Electric propulsion generator and motor lubricating oil temperature	High	See ~~8.1.11~~ 9.1.13
Electric propulsion generator and motor lubricating oil supply pressure	Low	See ~~8.1.12~~ 9.1.12
Power limitation	—	Indication, see 16.4.8 and 16.4.9

Volume 3, Part 3, Chapter 2
Fire Protection

CORRIGENDUM

■ *Section 8*
Fire and by-product containment

8.1 Fire and by-product containment objective

8.1.3 Where the Separate Machinery Spaces ★ (star) Enhancement notation is selected, the requirements of ~~Pt 1, Ch 5,5.7~~ Vol 1, Pt 1, Ch 2,3.8 are also applicable.

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Published by Lloyd's Register
Registered office
71 Fenchurch Street, London, EC3M 4BS
United Kingdom